

R E M A R K S

The Examiner has required restriction of the claimed invention, and listed the following group classifications:

Group	Claims	Description
I	1-20	woodchuck hepatitis virus (WHV) cores
II	21-24	methods for inducing immune response to a hybrid WHV core
III	25-31	methods for producing an immunogenic hybrid WHV core
IV	32-33	ground squirrel hepatitis virus (GSHV) cores
V	34	methods for inducing immune response to a hybrid GSHV core
VI	35	methods for producing an immunogenic hybrid GSHV core

Applicants hereby elect to prosecute the product claims of Group I (Claims 1-20). In addition, Applicants assert their intention to retain the right to rejoiner the process claims of Groups II (Claims 21-24) and III (Claims 25-31), in accordance with the provisions of MPEP 821.04. The process claims of Groups II and III already include or have been amended to include all of the limitations of product Claim 1 of elected Group I. Briefly, Applicants have amended Claim 25 and canceled Claim 31, in order to further the prosecution of the present application and Applicants' business interests, without acquiescing to the Examiner's arguments, and while reserving the right to prosecute the original, similar, or broader claims in one or more future application(s). These amendments do not introduce new matter and are not intended to narrow the scope of any of the claims within the meaning of *Festo*.¹

The Examiner has also required that Applicants elect a species for examination, in the event that Applicants elect to prosecute the product claims of Group I. In particular, the Examiner has requested that Applicants select a C-terminal species from those listed in dependent Claims 13-15. Thus, Applicants elect for examination purposes the C-terminus designated as HyW-2 in Table 1 (SEQ ID NO:17), with Claims 1-12, and 16-20 of Group I being generic to this election. Applicants respectfully remind the Examiner that upon allowance of a generic claim, that Applicants are entitled to consideration of claims to

¹ *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 122 S.Ct. 1831, 1838, 62 USPQ2d 1705, 1710 (2002).

additional species (*e.g.*, additional C-termini recited in Claims 13-15), which are written in dependent form or otherwise include all the limitations of an allowed generic claim, as provided by 37 CFR 1.141.

Applicants respectfully question the necessity of the species election (*e.g.*, C-terminus) in the examination of the instant application, since the nature of the invention is primarily a vaccine platform having interchangeable C-termini to permit efficient expression and assembly of hybrid hepatitis virus core proteins comprising one or more of a diverse array of heterologous antigens at various linkage sites (*See e.g.*, Table 9). Applicants teach

the identification of an expanded number of insertion sites was dependent on additional modifications to the C-terminus that stabilize the internal insertions. Indeed, 21 separate C-terminal modifications (*See*, Table 1) have been generated for use in combination with 17 insertion sites, to ensure efficient hybrid WHcAg particle assembly (Specification, at page 49, lines 13-17).

In addition, while many of the C-termini are distinct, others are related in that they are derived from the wild type woodchuck hepatitis B virus core protein sequence (*e.g.*, SEQ ID NO:2) by removal of multiple residues. Applicants teach that the

library of C-termini is expanded to eliminate certain motifs (*e.g.*, RNA/DNA binding motifs) and to accommodate the addition of other linker/spacer sequences (Specification, at page 56, lines 1 and 2).

Accordingly, Applicants respectfully urge the Examiner not to limit the examination of the instant application to a given C-terminus. Furthermore, should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned collect.

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